



MAINE STEP-UP PROGRAM AGREEMENT

Leadership Track

College of the Atlantic

PURPOSE

The greatest human imperative of the 21st century will be using earth's resources in sustainable ways to meet human needs and protect the diversity of our ecosystems. Through its own natural cycles, the earth provides clean water and air, fertile soils, and a myriad of plants and animals, all of which are essential to sustain life. We must find ways of producing products and providing services that model nature's cyclical design and sustain its productive capacities. In addition, where we can we must restore those capacities diminished by past misuse.

Environmental regulatory programs of the last 30 years have done much to clean and protect our waters, air and land. Now, new approaches to environmental protection are needed if continuous improvements are to be realized.

The Maine Department of Environmental Protection, hereinafter referred to as DEP, and College of the Atlantic, hereinafter referred to as COA, have agreed to explore new ways of protecting the environment that go beyond regulatory compliance. COA commits to continuously improve its business practices to protect people and the environment. COA will publicly report on its progress to inspire other businesses to seek improvement in their own environmental performance.

DEP commits to assist COA on its "climb up the mountain" as COA accepts the challenge—to find environmentally sustainable ways of doing business. The Goals Toward Sustainability set forth below in Section 2. B. refer to the "Pathways" described in the "Climbing the Mountain" diagram found in the Department's A Guide for Your Business: Smart Production and the Maine STEP-UP Program.

1. INTRODUCTION

College of the Atlantic (COA) was founded in 1969 to engage students in broad investigation of Human Ecology, the relationships between humans and our environment, including its natural, social and constructed components; and to prepare graduates to improve those relationships. We believe it to be the first U.S. institution of higher learning founded for that mission. COA has been certified to award degrees by the State of Maine since 1969 and accredited by the New England Association of Schools and Colleges since 1973. Degrees currently awarded are the Bachelor of Arts and the Master of Philosophy, both in Human Ecology. COA is certified by the IRS as a 501(c) 3 organization.

The college's purpose is communicated in its vision and mission statements, both of which were approved by the entire college community, including the Board of Trustees.

Vision Statement: The faculty, students, trustees, staff and alumni of COA envision a world where people value creativity, intellectual achievement, and the diversity of nature and human cultures; and where, with respect and compassion, individuals will construct meaningful lives for themselves, gain appreciation for the relationships among all forms of life, and safeguard the heritage of future generations.

Mission Statement: COA enriches the liberal arts tradition through a distinctive educational philosophy--Human Ecology. A Human Ecological perspective integrates knowledge from all academic disciplines and from personal experience to investigate--and ultimately improve--the relationships between human beings and our social and natural communities. The Human Ecological perspective guides all aspects of education, research, activism, and interactions among the College's students, faculty, staff, and trustees. The COA community encourages, prepares, and expects students to gain the expertise, breadth, values, and practical experience necessary to achieve individual fulfillment and to help solve the problems that challenge communities everywhere

In addition to its 34 acre shore front campus in Bar Harbor, the college owns Mt. Desert Rock, a 3-1/2 acre lighthouse island 23 miles offshore from Mt. Desert Island (MDR); and 11 acres at the southern tip of Great Duck Island (GDI), including the lighthouse and associated structures. Researchers investigate the ecology of whales, seals and seabirds at MDR. At GDI the college is collaborating with the Intel Research Laboratory at Berkeley and the University of California at Berkeley in the first beta testing of Intel's new technology for remote sensing. The college also owns and operates an 85-acre organic farm, Beech Hill Farm, which produces fruits and vegetables for retail sale at its farm stand and for wholesale distribution to restaurants and the college's dining hall.

COA enrollment is currently approximately 275 students and 25 faculty, with targeted growth to at least 300 students and 30 faculty by 2006. Students come

from over 35 states and 25 countries. During summer, the college offers classes for high school teachers, graduate students, undergraduates and elementary school students. Throughout the year it hosts classes and lectures for Acadia Senior College.

The college has approximately 1,200 graduates and 5,000 alumni of summer programs and other activities. Percentages of graduates in various career fields include education (21%); environmental sciences (18%); arts, design and architecture (17%); business (13%); social service, government and law (12%); health professions (10%); communications (5%); engineering (2%); miscellaneous (2%). Approximately 50% of graduates continue their education in graduate or professional schools.

Through its internship requirement, service learning requirement, research programs partnerships and outreach initiatives, COA faculty, students and staff help improve educational opportunities, guide sustainable economic development, and conserve natural resources locally in Maine and elsewhere. COA also participates in numerous partnerships with town governments, state agencies, Acadia National Park and other federal entities, businesses, and educational and conservation organizations.

Honors to COA include recognition by the John Templeton Foundation for encouraging character development; by the U.S. Environmental Protection Agency's New England office and Down East Magazine for outstanding achievements in conservation; and by the John D. and Catherine T. MacArthur Foundation for its distinctive approach to liberal arts education, *"building a coherent and broad curriculum around the unifying theme of the relationship between human beings and their natural and social environments"* and for *"its special collaborative relationships with its local community."*

The DEP's STEP-UP Program is an excellent instrument to assist COA in its quest for sustainability. COA commits to participate in this program and to strive toward sustainability goals for its business. The Department will assist the college by providing technical services and public recognition for achievements made by COA under the STEP-UP Program agreement during its three-year term. The Department will assign a senior staff person to work with COA during the design and implementation of the agreement

2. PERFORMANCE COMMITMENTS

A. Environmental Business Practices

- **Compliance Status** - COA is registered as a small generator of hazardous waste (55 gallons or less) (MEX020000000, MEP 000015466). COA also holds DEP license #14568 permitting underground fuel storage; and DEP license # W003258-40-B-R for discharge of overboard discharge sewage at

Great Duck Island, town of Frenchboro, Maine, but no sewage is currently discharged at the site.

COA holds a leased lands permit from the State of Maine for its marine dock and floats at its campus on Frenchman Bay.

COA recently completed a voluntary self-audit as part of the United States EPA New England College and University Initiative: Self-Audit Policy. In fulfillment of that program, COA completed an inventory of all petroleum and hazardous substances on the campus; completed and adheres to an oil spill containment plan for every petroleum source identified on campus; and contracts with a licensed hazardous waste remover, Environmental Projects, Inc., Yarmouth, Maine, for collection and proper disposal of any hazardous substances found or generated on campus.

In 2002, COA embarked on a quest for sustainability as a comprehensive, tangible expression of its vision and mission. COA has also recently joined with several other colleges in a partnership to focus our institutions on attaining sustainability. The college defines sustainability as the set of choices and actions which will help people and nature to flourish. COA intends to become fully sustainable by the year 2020, when children born this year will enter college. Sustainability will be defined in operational, environmental and financial terms with goals, metrics and milestones, including those detailed below in this agreement. Through this initiative COA intends to become a model of sustainability for higher education as well as our surrounding communities.

- **Environmental Management Pathway to Sustainability** - A written overview and evaluation of the college's environmental practices is necessary for proper management. For that purpose, COA will implement a comprehensive Environmental Management System (EMS) based on the standards established by ISO 14001. This report will identify key information needed for optimizing environmental performance in all aspects of institutional operation. It will provide a history of the college's environmental actions, as well as current baseline evaluation for all tracks identified in the STEP-UP "Climbing the Mountain" diagram (energy use, materials flow, safety, compliance etc.) It will also identify goals and metrics for improvement. COA will be guided by examples of similar documents that may be available from other colleges. For guidance in this task, COA will consult organizations and programs with which it is already collaborating, such as the National Wildlife Federation's Campus Ecology Program, the DEP, other STEP-UP companies, and/or qualified consultants. The EMS will be completed by April 2005. A copy of the document will be submitted to a third-party reviewer for review and to the Maine DEP. Julian Keniry, founder of the Campus Ecology program, has already visited COA and has volunteered to perform a third-party review. Other reviewers may also be engaged.

As part of this pathway, COA will create an Office of Sustainability and hire a Director for it. The Director will engage faculty, students and other members of the community to promote sustainability, solicit feedback regarding progress and to evaluate progress in meeting DEP STEP-UP goals. The job description for the Director of Sustainability will include the following specific responsibilities: Oversee all COA-related efforts on the journey to sustainability. Design and lead educational efforts to educate students and employees regarding goals and implementation of the journey to sustainability. Consult with all employees who order materials used on campus to ensure that the goals specified below in the materials flow pathway to sustainability are met. Create an Advisory Committee for Sustainability and organize regular public meetings at least twice each year during the three-year term of the agreement for the purpose of reviewing progress toward sustainability. The DEP STEP-UP liaison will be invited to attend those meetings, as will representatives of nearby STEP-UP participants, representatives of local town governments, and representatives from the local business and educational communities.

- **Workers and Community Pathway To Sustainability** - COA commits to college-wide training and continuous improvement programs in all tracks identified in the STEP-UP “Climbing the Mountain” diagram. The COA workforce is already committed to the general goal of sustainability and much progress has already been made, but additional opportunities remain for education and collaboration toward specific goals and for improvement in all areas. Furthermore, new developments in products and services will permit further improvements that may not be predictable today.

To improve education and participation in sustainability initiatives undertaken through the STEP UP program, environmental updates will be incorporated on a monthly basis into meetings of the various campus constituencies, including the All College Meeting, President’s Council and meetings of faculty, staff and students. The goals will be to engage everyone in the college’s efforts to save energy, decrease pollution, and reduce material use and improve reuse and recycling.

COA will form an Advisory Committee for Sustainability to include members from the college, the MDI community, Jackson Laboratory, and possibly others. Meetings of the advisory committee will be held at least twice annually. The DEP STEP-UP liaison will be invited to attend the meetings of the advisory committee. COA will communicate STEP-UP goals and progress to the advisory committee and seek their feedback on COA’s sustainability initiatives.

B. Goals Toward Sustainability

- **Energy Pathway To Sustainability** - COA uses approximately 60,000 to 70,000 gallons of Number 2 heating oil annually to heat its campus; and uses nearly one million kilowatt hours of electricity. COA will identify and implement options to reduce total energy use through conservation as well as the associated emissions of air pollutants and CO₂. COA commits to achieving the following goals during the three-year STEP-UP agreement:
 1. Reduce total energy use by at least 10% annually from a FY 2003 baseline for each of the next three years using improved education, conservation and renovation. Among other actions, COA will measure exhaust output from existing furnaces and use results to design and implement a plan and schedule for replacing inefficient heating plants with more efficient models.
 2. Contract for sources of renewable electrical energy to meet 100% of campus needs on a schedule by which at least 33% of the goal would be achieved per year for the next three years. This action will also satisfy COA obligation as a participant in the Green Energy Partners program of the U.S. Environmental Protection Agency.
 3. Use biofuel both on campus and at the college's research islands and farm. The goal is to have biofuel replace 30 percent of fossil fuel, using a baseline of fossil fuel consumed in FY 2003.
 4. Seek advice from energy consultants as appropriate to achieve these goals.
 5. Using an FY 2003 baseline, calculate the greenhouse gas emissions from COA's: use of fossil fuel energy at all of its facilities, motor vehicle commuting by students and faculty, on campus use of motor vehicles and vans for transporting students, and from purchased electrical energy.
 6. Reduce total greenhouse gas emissions from the above sources (listed in #5) by 10% per year, for a total greenhouse gas emissions reduction of 30% over the three-year agreement.
 7. By January 1, 2006 enter into a carbon emission reduction agreement with the State of Maine. COA commits to having its carbon emission reductions 3rd-party verified.
- **Transportation Pathway To Sustainability** - COA burns fossil fuel, with its consequent emission of CO₂ and other pollutants, to power cars and trucks used on campus and vans for transporting students. Furthermore, faculty, staff and any students who live off campus burn fossil fuel to run their cars when they commute to and from campus. COA commits to reducing the amount of fossil fuel burned for transportation by 10% per year for each of the three years of the STEP-UP agreement. To do this, COA will:

1. Steadily replace its automotive fleet with low-emission, high-miles-per-gallon (MPG) vehicles such as electric vehicles, gasoline/electric hybrids, low-emission diesel engines or others.
 2. Partner with the Jackson Laboratory (JAX) and towns on Mt. Desert Island to sponsor or encourage mass transportation.
 3. Partner with the Jackson Laboratory (JAX) and towns on Mt. Desert Island to create a more efficient system for car-pooling.
 4. Reduce the need for student commuting by constructing additional high-performance student housing on campus to provide at least 50 new beds. Energy performance of the new building will be at least equivalent to gold LEED certification standards to reduce the long-term energy needs to climate-condition the building.
 5. Identify and create incentives to encourage members of the COA community, and others, to replace low miles per gallon personal vehicles with more fuel-efficient models.
 6. Collaborate with MDI Tomorrow and other community initiatives to promote bicycles as alternatives to motorized transportation and to improve bicycle safety.
- **Materials Flow Pathway To Sustainability** - Though COA does not manufacture tangible products, it does require and consume material goods. In addition to fuel, which is discussed above, examples of materials used or received include books, paper, packaging, food and food packaging, construction materials, computing equipment, furniture, laboratory equipment and expendables and furnishings of various kinds. The college will carry out the following actions:
 1. By June 2004, COA will complete a baseline study of the amount of materials of different types used and purchased by the college, identify the size and rate of desired reductions, along with strategies for accomplishing them, and will commit to a plan and schedule for making those reductions with particular emphasis on reducing materials that become hazardous or universal wastes.
 2. Also by June 2004, COA will measure the efficiency with which various materials on campus are reused, recycled or composted, identify goals and methods for improving those efficiencies, and commit to a plan and schedule for making those improvements.
 3. Beginning immediately, COA will estimate the proportion of materials purchased from certified or other sustainable sources, along with the environmental characteristics underlying such certifications; and will set goals for improvements in those percentages.
 4. Beginning immediately, COA will phase out all chlorine-containing cleaning products, replacing them with hydrogen peroxide based products or other acceptable alternatives, to be completed by the end of 2004.
 5. Beginning immediately, COA will identify and eliminate the purchase of products to which mercury is added during manufacture or formulation if mercury-free alternatives of comparable performance are available at

reasonable cost. Where mercury-free alternatives of comparable performance are not available at reasonable cost, COA shall give preference to the purchase of functional, reasonable cost product makes and models containing the lowest amount of added mercury. COA will replace devices containing mercury such as thermostats, thermometers, etc. with non-mercury containing alternatives. COA will also eliminate any elemental mercury from the campus by working with the Department to ensure its safe disposition.

C. Measurement Methods

COA will measure total energy use in gallons and total BTUs, both absolutely on a per-square-foot and per-person basis, compared to the FY2003 baseline for fuel oil, liquefied propane, electricity and motor vehicle fuel for company vehicles. The amount of heating fuel used will be normalized to account for the variation between years in the number of heating degree-days

COA will also estimate fuel used by faculty, staff and students in commuting. The savings in money and the reduced emissions of CO₂ and other pollutants realized as a result of the reduction in energy use will be calculated.

Electricity use will be measured through meter readings of kilowatt-hours.

Materials will be measured in pounds and/or volume both absolutely and on a per-square-foot and per-person basis, compared to the FY2003 baseline.

The amount of sulfur compounds, NO_x and CO₂ emitted by COA furnaces will be measured and total emissions calculated. Adjustments will be made to furnaces for optimal fuel combustion efficiency and for establishing a priority-ranked list of furnaces to be replaced.

Reports on energy use and materials flows will be produced quarterly. Each report will cover activities, milestones achieved vs. plan, and actual dollar results vs. plan. The tracking system will use a visual display to show progress (such as bar charts, graphs or tables) so that employees, members of the community advisory committee, and others can easily follow institutional progress. The Director of Sustainability will be responsible for overseeing all of these activities. Environmental metrics will be reported to all students and employees to enhance interest in COA environmental performance and highlight successes and needs.

D. Public Involvement

Meetings of the Advisory Committee for Sustainability, described above, will be held at least twice annually.

COA will communicate STEP-UP goals and progress on an ongoing basis in the key areas of endeavor. COA will issue press releases about its participation in the STEP-UP program and will also publish STEP-UP reports and supporting information on the COA website. Individual news items will be published whenever there is anything to report that could stimulate interest in sustainability and actions toward achieving it in the surrounding communities. A list of highlights and progress will be published quarterly. A comprehensive report of progress will be published annually.

E. Mentoring

As part of its journey toward sustainability, COA will make itself available to all parties interested in joining the journey. COA will enjoy particularly close collaboration with The Jackson Laboratory, which is only four miles away. COA is also interested in joining the sustainable manufacturing forum proposed by Interface Fabrics Group in its STEP-UP agreement. Also, upon demonstrating competence in sustainability efforts, COA commits to mentoring another Maine educational institution in its journey toward sustainability.

F. Relationship

COA will work closely with the DEP to achieve its sustainability goals by complying with regulatory requirements while working to find mutually agreeable solutions to issues that may stand in the way of achieving its environmental improvement goals.

COA requests that its DEP STEP-UP Program contact attend quarterly STEP-UP program meetings, at which progress toward sustainability goals will be discussed and adjustments made to COA performance goals as necessary.

DEP will make staff available to COA for technical and regulatory assistance. This assistance will be provided consistent with existing State law and agency policy.

DEP expects to forego civil penalties for certain types of first-time violations discovered in the process of providing assistance or disclosed as a result of compliance audits performed by COA when COA corrects the non-compliant condition within the shortest practicable time period, and in all cases within 90-days of discovery. Violations excluded from this provision are those listed in Maine DEP's Small Business Compliance incentives Policy, Section III (as amended February 14, 1996) and its Supplemental Environmental Projects Policy, Section V (as amended June 15, 2000). Regular or necessary compliance inspections performed as part of day-to-day business at Maine DEP are not subject to these provisions.

G. Recognition

DEP will recognize COA participation in the STEP-UP Program by including specific information on the STEP-UP web pages maintained by the State, and in

press releases from time-to-time to keep the general public informed of COA's status in the program. COA will also receive a Governor's Award for Environmental Excellence without the need for application when any Sustainability Goal detailed in this agreement is achieved.

3. REPORTING

COA will submit quarterly progress reports to DEP citing accomplishments toward achieving sustainability goals. The reports will utilize the reporting format described in Section 2. C above. DEP agrees to hold identified COA proprietary business data confidential.

DEP will report quarterly to COA on its progress toward meeting its commitments outlined in Section 2. F above.

4. TERMINATION

Either party to this Agreement may terminate the participation of COA in the STEP-UP Program with 30-days notice to the other party.

WITNESS here today, November 7, 2003 that the undersigned parties enter into this agreement.

John E. Baldacci, Governor State of Maine

Steven Katona, President
College of the Atlantic